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1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			3743		
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/719,407	SCOTT ET AL.				
Office Action Summary	Examiner	Art Unit				
	Shumaya B. Ali	3743				
The MAILING DATE of this communication apperiod for Reply	ppears on the cover sheet with the c	orrespondence ac	idress			
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).		ely filed s will be considered time the mailing date of this c O (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 21	November 2003.					
·_ ·	is action is non-final.					
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Disposition of Claims						
4) ⊠ Claim(s) <u>1-39</u> is/are pending in the applicatio 4a) Of the above claim(s) is/are withdress 5) ☐ Claim(s) is/are allowed. 6) ☒ Claim(s) <u>1-39</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/	awn from consideration.					
Application Papers						
9) The specification is objected to by the Examination 10) The drawing(s) filed on 21 November 2003 is Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examination 11.	fare: a) ☐ accepted or b) ☐ objected or b) ☐ objected or b) ☐ objected or awing(s) be held in abeyance. See ction is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 C	FR 1.121(d).			
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Burea * See the attached detailed Office action for a list	nts have been received. Its have been received in Application Ority documents have been receive au (PCT Rule 17.2(a)).	on No d in this National	Stage			
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 	Paper No(s)/Mail Da	te atent Application (PT0	O-152)			

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6-12,13-20,24-27, and 33-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Grim et al. US Patent 5,823,981

2. **As to claim1, Grim et al. disclose** a compression garment for compressing a portion of a body of a patient, the compression garment (see col.1 lines 14-17) comprising: a garment body (see fig.1 reference object 10): an outer layer (see fig.7 reference objects 74 and 92, col.3 lines 37-43); an inner layer (fabric layer between the reference objects 106 and 96; col.9 lines 5-11) secured to the outer layer, the inner layer at least partially bounding a channel (where the leg or arm will engage) adapted to receive a portion of a body of a patient (arm or leg), the inner layer comprising: a backing (see fig.7 reference object 93) comprising a woven fabric sheet or a perforated polymeric sheet having an interior surface (space where the reference object 98 in fig.7 is disposed) facing the channel; and plurality of pressure projections (see fig.7 reference object 98) extending from the backing toward the channel, the pressure projections being integrally formed with or mounted on the backing (see col.8 lines 60-67, col.9 1-4); and a layer of compressible cushioning (see fig.7 reference object 96) material disposed between the outer layer and the inner layer.

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3. **As to claim 2, Grim et al. disclose** a compression garment as recited in claim1, wherein the garment body comprises a tubular sleeve (see fig.5 disclosing a tubular knee brace) adapted to receive an arm or leg of the patient.

- 4. **As to claim 3, Grim et al. disclose** a compression garment as recited in claim1, wherein the backing comprising the woven fabric sheet (fabric layer 106) and the pressure projections are integrally woven into the woven fabric sheet (pressure projection is enclosed with fabric lining material) (see col.9 lines 1-4).
- 5. **As to claim 4, Grim et al. disclose** a compression garment as recited in claim 3, wherein the inner layer comprises a corduroy material (see col.4 lines 15-20).
- 6. **As to claim 6, Grim et al. disclose** a compression garment as recited in claim 1, wherein the pressure projections are sewn or secured by an adhesive to the backing (see col.8 lines 65-67, col.9 lines 20-31).
- 7. **As to claim 7, Grim et al. disclose** a compression garment as recited in claim 1, further comprising a cover layer (see fig.7 reference object 93) mounted to the inner layer so as to directly cover the pressure projections.
- 8. **As to claim 8, Grim et al. disclose** a compression garment as recited in claim 1, wherein the cover layer comprises a sheet of resiliently stretchable material (fabric layer 106 covering the cover layer) (see col.9 lines 1-4).
- 9. **As to claim 9, Grim et al. disclose** a compression garment as recited in claim 1, further comprising a plurality of compression straps (see fig.5 reference objects 78 and 86).
- 10. **As to claim 10, Grim et al. disclose** a compression garment as recited in claim 1, wherein the inner layer does not comprise a polymeric foam (inner layer is made out of fabric material 102) (see col.9 5-11).

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11. **As to claim 11, Grim et al. disclose** a compression garment as recited in claim 1, wherein the garment body has an interior surface (facing the channel) and an exterior surface (see fig.7 reference objects 74 and 92 col.3 lines 47-53) with a maximum non-compressed thickness extending there between in a range between about 0.5 cm and about 2 cm (note: applicant discloses compression garment comprising varying thickness on page 5 of the disclosure)(see col. 5 lines 41-49).

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- 12. **As to claim 12, Grim et al. disclose** a compression garment as recited in claim 1, wherein the outer layer is comprised of a sheet of woven fabric material (col.5 lines 17-26).
- 13. **As to claim 13, Grim et al. disclose** a compression garment for compressing a portion of an arm or a leg of a patient, the compression garment (see col.1 lines 14-17) comprising: a body substantially tubular configuration or having the form of a panel that can be selectively rolled into a substantially tubular configuration (see fig.5, tubular knee brace 10), the body comprising: an outer layer (see fig.7 reference objects 74 and 92, col.3 lines 37-43); an inner layer (fabric layer between the reference objects 106 and 96; col.9 lines 5-11) secured to the outer layer, the inner layer at least partially bounding an elongated channel (where the leg or arm will engage) adapted to receive a portion of an arm or a leg of a patient, the inner layer comprising: a woven fabric sheet (see fig.7 reference object 93) having an interior surface (space where the reference object 98 in fig.7 is disposed) facing the channel facing the channel; and plurality of pressure projections (see fig.7 reference object 98) extending from the fabric sheet toward the channel, the pressure projections being integrally formed with or mounted on the fabric sheet (see col.8 lines 60-67, col.9 1-4); and a layer of resiliently compressible foam (see fig.7 reference object 96) material disposed between the outer layer and the inner layer.

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- 14. **As to claim 14, Grim et al. disclose** a compression garment as recited in claim 13, wherein the pressure projections are integrally woven into the woven fabric sheet (see col.9 lines 1-4).
- 15. **As to claim 15, Grim et al. disclose** a compression garment as recited in claim 14, wherein the inner layer comprises a corduroy material (see col.4 lines 15-20).
- 16. **As to claim 16, Grim et al. disclose** a compression garment as recited in claim 13, wherein the pressure projections are mounted onto the woven fabric sheet (the inner layer is composed of fabric liner, see col.8 lines 65-67, col.9 lines 20-31).
- 17. **As to claim 17, Grim et al. disclose** a compression garment as recited in claim 13, wherein the pressure projections comprise brushed cotton, a brushed polymeric material, woven fabric, or piled fabric (see col. 4 lines 15-20 for various choice of pressure projection material).
- 18. **As to claim 18, Grim et al. disclose** a compression garment as recited in claim 13, wherein the pressure projections do not comprises polymeric foam (other choices for pressure projection material are disclosed in col.4 lines 15-20).
- 19. **As to claim 19, Grim et al. disclose** a compression garment as recited in claim 13, further comprising a cover layer mounted on the inner layer so as to directly cover the pressure projection (fabric layer 106 covering the cover layer and the reference object 98 in fig.7 or the pressure projections; which are directly mounted to the inner layer) (see col.9 lines 1-4).
- 20. **As to claim 20, Grim et al. disclose** a compression garment as recited in claim 13, wherein the means for constraining at least a portion of the body comprises a plurality of compression straps secured to or encircling the garment body (see fig.5 reference objects 84 and 86).

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- 21. **As to claim 24, Grim et al. disclose** a method for manufactu7ring a compression sleeve, the method comprising: stretching a cover layer comprised of a resiliently stretchable sheet of material (see col.3 lines 37-47); either before or after stretching the cover layer, applying an adhesive to at least an exterior surface of the cover layer (see fig.7 reference object 93) or an interior surface of an inner layer, the inner layer having a plurality of space apart pressure projections (see fig.7, reference objects 98 are spaced apart) on the interior surface (surface facing the channel); securing the exterior surface of the stretched cover layer to the interior surface of the inner layer (all layers are secured via an adhesive bonding; see col.6 lines 50-67, col.7 lines 1-7); and either before or after securing the stretched cover layer to the inner layer, attaching an outer an outer layer over an exterior surface of the inner layer (see col.6 lines 50-67, col.7 lines 1-7), the comprised cover layer, inner layer, and outer layer forming a body (see fig.5 tubular knee brace with body 10).
- 22. **As to claim 25, Grim et al. disclose** a method as recited in claim 24, further comprising securing the body into the form of a tubular sleeve (see fig.5 tubular knee brace 10).
- 23. **As to claim 26, Grim et al. disclose** a method as recited in claim 24, further comprising positioning a layer of polymeric foam (see fig.7 reference object 96) between the inner layer and the outer layer.
- 24. As to claim 27, Grim et al. disclose a method as recited in claim 24, wherein the inner layer is comprised of a corduroy material (see col.4 lines 15-20).
- 25. As to claim 33, Grim et al. disclose a compression garment for compressing at least a portion of an arm or a leg of a patient (see fig.8), the compression garment comprising: a body comprising: a sleeve (see fig.5 tubular knee brace 10) having a substantially tubular configuration or having a form of a panel that can be selectively rolled into a substantially tubular configuration,

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the sleeve having an exterior surface (see fig.7 reference object 79 and 92 col.3 lines 47-53) and an opposing interior surface, the interior surface (surface between 106 and 96 col.9 lines 5-11) bounding a channel (where the leg/arm will engage) configured to receive at least a portion of an arm or a leg of a patient; and a terminal portion (the two openings of the sleeve to slide the body part) mounted at an end of the sleeve, the terminal portion having an interior surface (surface facing the channel) encircling a channel adapted to receive a hand or foot of the patient, the terminal portion being configured to apply progressive pressure along the length of the hand or the foot when received therein without the use of an external pressure force (via the elastic nature of the tubular sleeve and the pressure projection points); and a plurality of compression straps (see fig.5 reference objects 78- and 86) connected to or removably disposed on the exterior surface of the sleeve, each of the compression straps being configured to selectively constrict around the sleeve when the compression sleeve is in the substantially tubular configuration.

- As to claim 34, Grim et al. do not disclose a compression garment as recited in claim 33, wherein no compression straps are mounted on or encircle the terminal portion of the body (two opening ends of the sleeve) (see fig.5 reference objects 78 and 86 are mounted at the e ends of the sleeve).
- 27. As to claim 35, Grim et al. disclose a compression garment as recited in claim 33, wherein the body comprises an inner layer, the inner layer comprising: a backing (see fig.7 reference object 93) comprising a woven fabric sheet (fabric 106 col.9 lines 1-4) or a perforated polymeric sheet having an interior surface (space where the reference object 98 in fig.7 is disposed) facing the channel (where the leg/arm will be engaged), and plurality of pressure projections (see fig.7 reference object 98) extending from the backing toward the channel, the

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pressure projections being integrally formed with or mounted on the backing (see col.8 lines 60-67 and col.9 lines 1-4).

- 28. As to claim 36, Grim et al. disclose a compression garment as recited in claim 34, wherein the inner layer comprises a corduroy material (see col.4 lines 15-20).
- 29. As to claim 37, Grim et al. disclose a compression garment as recited in claim 35, wherein the body comprises an outer layer secured to the inner layer (via adhesive) (col.3 lines 45-47, col.6 lines 52-57), the outer layer comprising a sheet of woven fabric (see col.5 lines 17-26).
- 30. As to claim 38, Grim et al. disclose a compression garment as recited in claim 37, further comprising a layer of polymeric foam disposed between the inner layer and the outer layer (see fig.7 reference object 96).
- 31. **As to claim 39, Grim et al. disclose** a method for applying pressure to an arm or leg of a patient, the method comprising: inserting an arm or a leg of a patient (see fig.8) into a channel of a sleeve such that a corresponding hand or foot of the patent (patient) is received within a channel of a terminal portion (two open ends of the sleeve) at the end of the sleeve, the terminal portion being contoured to apply progressive pressure to the hand or foot along the length thereof without adjustment of applying external force to the terminal portion (no external force needed due to the pressure projections see fig.7 reference objects 98 and straps see fig.5 reference objects 78 and 86); and applying an external pressure force to the sleeve over the arm or leg of the patient so as to apply a compressive force to the arm or leg, the external pressure force not being applied to the terminal portion extending over the hand or foot (see col.1 lines 14-17).

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Claim Rejections - 35 USC § 103

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the obviousness of Grim et al. US Patent 5,823,981

33. **As to claim 5, Grim et al. does not disclose** a compression garment as recited in claim 1, wherein the pressure projections comprise a plurality of elongated ribs. However, the applicant discloses alternative arrangements of the pressure projections in figures 5A-C. Grim et al. pressure projection would be considered as randomly disposed pressure projections disclosed in figures 5B-C. Therefore, it would have been obvious to one of ordinary skills in the art at the time of the invention to modify the randomly disposed pressure projections of Grim in order to provide the compression garment with an alternative arrangements of pressure projections as claimed in claim 5 for the purposes of providing compression force along the length of the arm/leg.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Grim et al. US Patent 5,823,981 in view of Arabeyre et al. US Patent 5,497,513

34. **As to claim 21, Grim et al. do not disclose** a compression garment as recited in claim 13, wherein the means for constricting at least a portion of the body comprises a resiliently stretchable tubular sock that can be selectively pulled over the body.

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35. **As to claim 21, Arabeyre et al. teach** a remedial support appliance for medical use on a leg or an arm comprising an elasticated compressive tubular sock (see fig.2 reference object 15) capable of treating edema (see col.3 lines 16-30). The elastic nature of the sock is acting as a self-securing apparatus that can be pulled over a body part. Arabeyre et al. further teach a stretchable tubular sock with out straps capable of providing compression force.

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36. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sleeve of Grim et al. in view of Arabeyre et al. in order to provide the sleeve with a stretchable tubular sock for the purposes of providing an alternative means for securing a body part in addition to providing extra compressive force to the arm or leg area.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grim et al. US Patent 5,823,981, Arabeyre et al. US Patent 5,497,513, and in view of Turtzo US Patent 6,254,554 B1.

- 37. **As to claim 22, Grim et al. disclose** a compression garment as recited in claim 13, wherein the body comprises: a tubular sleeve (see fig.5 tubular knee brace 10), **however do not disclose** the sleeve receives an arm of the patient; and a tubular portion configured to receive a hand of the patient.
- 38. **As to claim 22, Turtzo teaches** a compression sleeve for treating lymphedema comprising a sleeve that receives an arm of the patient (see fig.2, arm will be enclosed near the reference object 16); and a tubular portion configured to receive a hand (see fig.2, hand will be enclosed near the reference object 20 and 26) of the patient.
- 39. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the leg sleeve of Grim et al in view of Turtzo in order to construct a tubular

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sleeve for the hand portion with the same compressive concept and constructive parts as disclosed by Grim et al. for the purposes of providing compressive force in the arm and hand area.

- 40. **As to claim 23, Grim et al. do not disclose** a compression garment as recited in claim 13, wherein the tubular sleeve has a thickness and the tubular hand portion has a thickness that is greater than the thickness of the tubular sleeve.
- 41. Since it is obvious that the thickness/diameter of the sleeve many widely vary for the treatment of the body parts, Turtzo's hand sleeve can be also be constructed with the same thickness claimed by the applicant.
- 42. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the leg sleeve of Grim et al in view of Turtzo in order to construct a tubular sleeve for the hand portion with the same compressive concept and constructive parts as disclosed by Grim et al. and provide the sleeve with the thicknesses as claimed in claim 23 for the purposes of providing compressive force in the arm and hand area.

Claims 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grim et al. US Patent 5,823,981, Arabeyre et al. US Patent 5,497,513, and in view of Levine. US Patent 4,476,857.

As to claim 28, Grim et al. disclose a compression garment system for compressing at least a portion of an arm or a leg of a patient (see fig.8), the compression garment system comprising: a body having a substantially tubular configuration (see fig.5 tubular knee brace 10) or having the form of a panel that can be selectively rolled into a substantially tubular configuration, the body having an exterior surface (see fig.7 reference objects 74 and 92 col.3 lines 47-53) and an opposing interior surface (surface between 106 and 96, col.9 lines 5-11), the interior surface bounding a channel (where the leg will be enclosed) configured to receive at least a portion of an

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arm or a leg of a patient (see fig.8); a plurality of compression straps (see fig.5 reference objects 78 and 86), however do not disclose the straps are removably disposed on the exterior surface of the body, each compression strap being configured to selectively constrict around the body when the body is in the substantially tubular configuration; and a tubular compression sock comprised of a resiliently stretchable material, the compression sock being configured to encircle at least a portion of the body when the body is in the substantially tubular configuration so as to radially inwardly compress the body when the compression straps are removed from the body.

- 44. **As to claim 28, Levine teaches** a compressive orthosis device for an arm with removable strap assembly disposed on the exterior surface of the body (see fig.2 reference object 14 removably attached to the Velcro 32).
- 45. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the straps of Grim et al in view of Levine in order to provide the sleeve with removable strap assembly for the purposes of easily detaching the straps from the sleeve when required.
- As to claim 28, Arabeyre et al. teach a remedial support appliance for medical use on a leg or an arm comprising an elasticated compressive tubular sock (see fig.2 reference object 15) capable of treating edema (see col.3 lines 16-30). The elastic nature of the sock is acting as a self-securing apparatus that can be pulled over a body part. Arabeyre et al. further teach a stretchable tubular sock with out straps capable of providing compression force.
- 47. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the sleeve of Grim et al. in view of Arabeyre et al. in order to provide the sleeve with a stretchable tubular sock for the purposes of providing an alternative means for securing a body part in addition to providing extra compressive force to the arm or leg area.

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48. **As to claim 29, Grim et al. disclose** a compression garment system as recited in claim 28, wherein the body comprises an inner layer (fabric layer between the reference objects 106 and 96; col.9 lines 5-11), the inner layer comprising: a backing (see fig.7 reference object 93) comprising a woven fabric sheet or a perforated polymeric sheet having an interior surface (space where the reference object 98 in fig.7 is disposed) facing the channel; and plurality of pressure projections (see fig.7 reference object 98) extending from the backing toward the channel, the pressure projections being integrally formed with or mounted on the backing (see col.8 lines 60-67, col.9 1-4).

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- 49. **As to claim 30, Grim et al. disclose** a compression garment as recited in claim 29, wherein the inner layer comprises a corduroy material (see col.4 lines 15-20).
- 50. **As to claim 31, Grim et al. disclose** a compression garment system as recited in claim 29, wherein the body comprises an outer layer secured to the inner layer, the outer layer comprising a sheet of woven fabric (col.5 lines 17-26).
- 51. **As to claim 32 Grim et al. disclose** a compression garment system as recited in claim 31, further comprising a layer of compressible cushioning (see fig.7 reference object 96) material disposed between the outer layer and the inner layer.

Conclusion

52. The prior art made of record on form PTO-892 and not relied upon shows the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Shumaya B. Ali** whose telephone number is **571-272-6088**. The examiner can normally be reached on M-F 8:30 am-4: 30 pm.

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54. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Henry Bennett** can be reached on **571-272-4791**. The fax phone number for the organization where this application or proceeding is assigned is 571-273-6088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shumaya 8.

Examiner Art Unit 3743

Supervisory Parant Examiner